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Barry J. Zimmerman: An Expert Mentor through Cyclical Phases of Self-regulatory
Feedback

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Abstract

The purpose of this presentation is to highlight how Dr. Barry Zimmerman, as a mentor, incurs in his students the sense of self-efficacy. The theoretical framework of this presentation focus on how concomitant Zimmerman's mentoring approach is with his cyclical phases of self-regulation of learning. His first question to me was, "In what area do you want to become an expert?" Any description of Zimmerman as a mentor would include the seamless way he appropriates his research and theories to influence the way he guides his students. From the beginning, the agenda is set, the dissertation process is begun, and the presence of the expert mentor is evident, but not overwhelming. This is evidenced in that each step is a mutual decision between the mentor and the mentee, and cyclically processed. Guidance to set goals in the forethought phase is designed to encourage the student to identify appropriate strategies, examine self-efficacy beliefs, and take charge of his/her research. With a sense of independence the student becomes a researcher in the performance stage, which leads to engaging in self-reflection. Feedback from Dr. Zimmerman is the outcome of one's own self-evaluation, a thorough examination of attributions, and a considerable amount of revisions. At that point, the mentor has made his imprint, and the mentee becomes the model for future students. It is expected that attendees of this presentation will not only see Zimmerman, the renowned researcher and theorist, but the mentor who derives great satisfaction from the success of his students.

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Without question, the academic environment at the doctoral level presents its own unique case of mentoring. Recognition that academic learning is ultimately a personal experience complicates the already complex activity of mentoring. The players are a mentor, a novice, and a process, within a predetermined structure that can forever change the course of one's life (Cienkus, Haworth, & Kavanagh, 1996; Barrera, Braley, & Slate, 2010). Although the literature reflects much difficulty in arriving at a satisfactory definition of the phenomena of mentoring, individual accounts of the mentoring relationship have provided reliable and constructive analysis of the character of the relationship, and the functions it serves (Gherke, 1988; Kartje, 1996).

The purpose of this presentation is to highlight how Dr. Barry Zimmerman, as a mentor, incurs in his students the sense of self-efficacy. The theoretical framework of this presentation will focus on how concomitant Zimmerman's mentoring approach is with his cyclical phases of self-regulation of learning. The mentor's goal is to empower the student through the development of a sense of personal agency. As a result the doctoral candidate, from the very beginning, assumes a proactive role in shaping the organization, guidance, and regulation of the doctoral process.

Zimmerman as a Mentor

Among the distinctive achievements of Dr. Zimmerman as a mentor, is the selfless transmission of his professional legacy by releasing each student to investigate and produce an appropriate rendition of his work. Without qualification, the student is invited to partake of the wisdom and style that have enabled him to succeed professionally. Most important to him is the intrinsic satisfaction he gains from contributions made to the field by his students (Bembenutty, 2008).

Zimmerman's cyclical model of academic self-regulation is a complex, multifaceted process, which, integrates key motivational variables and self-processes (Cleary & Zimmerman, 2004). As a mentor he unobtrusively guides the doctoral candidate to apply self-regulatory strategies to the dissertation process. From this perspective, self-regulation is defined as self-generated thoughts, feelings, and behaviors

that are planned and cyclically adapted based on performance to attain self-set goals (Zimmerman, 1989).

The student is given the opportunity to regulate his/her academic behaviors and beliefs using the three cyclical phases of forethought (i.e., processes that precede any effort to act), performance control (i.e., processes occurring during the learning efforts), and self-reflection (i.e., processes occurring after learning or performance). The forethought processes influence the performance control processes, which in turn influence self-reflection phase processes. A cycle is complete when the self-reflection processes impact forethought phase processes during future learning attempts (Zimmerman, 2000; Cleary & Zimmerman, 2004).

An essential feature is a recursive feedback loop. This feedback loop provides the learner with information about his or her task performance that can be used to make adjustments during future learning events (Zimmerman, 2000; Bandura, 1986). This cyclical process enables self-regulated students to metacognitively monitor the effectiveness of their learning strategies and make adaptive changes, which lead to academic success.

Mentoring Doctoral Candidates

Doctoral students tend to redefine their identity while engaged in the learning process, going from novice to expert under the shaping and management of a mentor (Lazarus & Folkman, 1984). Individual accounts of Dr. Zimmerman's mentoring all include the recognition of an agentic perspective which operates through the continuous encouragement of intentionality and forethought, self-regulation by self-reactive influence, and self-reflectiveness about one's capabilities, quality of functioning, and the meaning and purpose of one's life pursuits (Bandura, 2001). In addition, Dr. Zimmerman personifies what some consider to be the most crucial element of the relationship, to support and facilitate the realization of his students' dreams (Levinson, Darrow, Klein, Levinson, & McKee, 1978).

I would surmise, that most doctoral students who begin the dissertation research process experience to some degree self-regulated learning deficiencies, and as a result, low self-efficacy. For many, the doctoral program is a life changing process, which pushes them into a discomfort zone that involves cultural changes in power relationship

expectations and academic accountability (Samuel & Kohun, 2010). In the case of Educational Psychology students, just securing a sample size that will produce significant results is often a barrier to successful outcomes of best-laid plans. These challenges demand a belief in “one’s capabilities to organize and execute the courses of action required to produce given attainments (Bandura, 1997, p.2) and to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events” (Wood & Bandura, 1989, p. 364), in sum, a realistic assessment of self-efficacy specific to elements of the doctoral training process.

The model I am presenting describes how doctoral candidates can be helped by the conversion of mentoring sessions into an instructional academy of self-regulatory processes. When the mentor personifies self-regulation, each and every aspect of the process is examined within the context of the cyclical phases of self-regulation. Mentoring sessions with Dr. Zimmerman are opportunities to exercise personal agency through one’s beliefs in his/her capabilities to produce desired effects by one’s own actions. When applied appropriately, this design of the self-regulatory cycle has been known to enhance not only progress in the program but also the perception of self-efficacy or control over the process (Zimmerman, Bonner, & Kovach, 2002). Based on the information drawn from the experiences of many doctoral candidates, one can see a clear and definite mentoring process embedded in his self-regulatory cycle giving students a sense of personal control which becomes a major source of intrinsic motivation to continue learning and producing on one’s own (Zimmerman & Paulsen, 1995).

The application of a self-regulated learning model to the dissertation process requires a mentor who is capable of consistently modeling the use of various self-regulated learning techniques that students can understand and adopt. In addition, it requires remaining cognizant of the students’ progress so that feedback can address specific areas, which require adjustment or revision. When the mentor requires self-regulatory processes as the guiding force in the development and planning of a dissertation, the doctoral candidate will more likely attribute successful outcomes to specific actions and experience a heightened sense of personal efficacy.

Self-Regulatory Competence

In the earliest stages of the doctoral program Dr. Zimmerman's relationship with his students goes beyond advising and is that of a mentor. He is observant of problems in individual performance, offers correction, and provides assistance, knowing that performance impacts self-efficacy. Throughout course work in self-regulation the doctoral student is encouraged to set the stage for the dissertation process by developing self-regulatory competence, shifting from social sources to self-sources in a series of levels (Schunk & Zimmerman, 1997; Zimmerman, 2000). As novice learners in a doctoral setting, skills and strategies are acquired from learning events designed by Dr. Zimmerman to include social modeling, teaching, task structuring, and encouragement. As a result of his guidance as an instructor, the doctoral candidate is rehearsing self-regulatory strategies to be used in planning, researching, and writing the dissertation.

Cyclical Model of Mentoring: The Dissertation Process

Forethought Phase

Dr. Zimmerman initiates the first phase of the process by establishing an arena where goals can be self-set and self-efficacy promoted. Based on his past experiences, the mentor's goals are in place for his role in the relationship. However, with each new doctoral candidate many of the variables change, and he is aware that adjustments will have to be made. In contrast, the novice is experiencing the dissertation process for the first time and will need to be guided through the cyclical phases of self-regulation several times before the dissertation is defended. Dr. Zimmerman's enthusiasm to begin the process with each doctoral candidate is evident. He provides a realistic agenda for work that needs to be accomplished over a long period of time, helping the student set long and short-term goals. He investigates prior experiences with each phase of the self-regulatory cycle by asking questions about the students' study habits, time management, and research interests. Detailed planning sessions help the student sustain motivation and increase self-efficacy as the outcomes begin to resemble the self-set goals.

Dr. Zimmerman pays careful attention to establishing a learning environment where the doctoral candidate is given choices. His first question to me was, "In what area do you want to become an expert?" In retrospect I realize that he was setting the

dissertation process in motion with a question that would reveal my beliefs, attitudes and processes prior to beginning our work together. My proactive role was immediately established through his knowledge the impact self-set goals would bring to the project. Setting the stage would require my agenda to include growth in the areas of goal setting and strategic planning as well as a variety of underlying motivational beliefs such as self-efficacy, goal orientation, intrinsic interest, and outcome expectations. I recall the look on his face when I responded, it said to me, “Go for it!”, which soon translated into, “Set goals!”.

Task analysis and goal setting would be overwhelming without input from the mentor. Dr. Zimmerman often responded to my questions during the forethought phase by referring to others (models), who had set similar goals, completed similar dissertations, used similar samples, were successfully employed, and published. He shared the way others analyzed the task, chose strategies, and formed outcome expectations. Rather than impose a recommendation he provided options that enabled me to make choices based on my interests and perceived self-efficacy for the section of the dissertation we were working on. The presence of the expert mentor is always evident, but never overwhelming. Each step is a mutual decision between the mentor and the mentee, and cyclically processed. His guidance successfully leads the doctoral candidate to set realistic goals, choose appropriate strategies, examine self-efficacy beliefs, and take charge of his/her research. With this sense of independence, the student becomes a researcher in the performance stage, which leads to engaging in self-reflection.

Performance Phase

In order to move into the performance phase, the doctoral candidate must evidence some sophistication as a self-regulated learner. Regular appointments with Dr. Zimmerman inspire self-control. Each session is planned with the goal to move the dissertation process along, identify barriers to performance, and make necessary adjustments. The many hours devoted by Dr. Zimmerman to the students’ research study instill in the candidate the motivation to be prepared with an up to date accounting of his/her research, evidence of progress monitoring for attaining goals, and an evaluation of the process. In this phase the mentor’s feedback encourages the student to use self-

control processes to systematically monitor his/her performance. Evaluation of feedback is interpreted for meaning during the self-reflection phase (Zimmerman & Schunk, 2001).

Self-control and self-observation during a research study requires the candidate be able to seek help and gain assistance from the mentor. Dr. Zimmerman knows the doctoral candidate will undoubtedly be challenged with situations that will need the expert's feedback so that adjustments can be made to the process. Each step is a mutual decision between the mentor and the mentee. He maintains an open line of communication with his students through impromptu office visits, emails, and telephone conversations. As a doctoral candidate under his supervision you begin to think you are the only student he is working with when you evaluate the numerous times you have been "stuck" and an email arrives with the "hint" you needed to move ahead with your research.

To encourage adaptive help seeking in the performance phase Dr. Zimmerman never provides the answer, he provides a response that will move the student towards resources other than himself. These resources can include faculty, students, or works from researchers who have published in your area of inquiry. Dr. Zimmerman's intention is to not only provide expert models, but coping models as well. During the dissertation process self-efficacy can be impacted when one has failed to attain a goal, which can lead to low self-efficacy. By providing a variety of resources the mentor is intentionally focusing the student on others who have reached their goals by remaining focused, using effective strategies, and monitoring their progress.

The cyclic process of self-regulation insures opportunities to monitor and evaluate progress, which will lead to necessary adjustments during the performance phase if goals are to be reached. For me the most challenging areas of the dissertation process was not in finding a sample, or in collecting data, or even finding significance. My problem area was my writing style. I often informed Dr. Zimmerman that I was not getting any younger and it would be great if the finish line was in sight. The push to finish was met with expert advice of my mentor to make adjustments to the entire process or the expected outcome would not be possible. He must have spent countless hours reading and providing feedback on my literature review, for which the revisions did not bring about the desired outcome. At this point, during the performance phase, my mentor

suggested changing strategies. He first made sure my self-efficacy was intact by informing me that in many arenas my writing would be considered very good. Then, he faced me with the reality that in the field of educational psychology I was falling short of what was required. Dr. Zimmerman presented the option to take a business-writing course, or work with someone who wrote for a business magazine.

Plans changed dramatically, and off I went to not only take a business-writing course, but also work with a writer from the Bloomberg Tradebook Magazine, my son. What might have been a summer of discouragement turned out to be a time well spent increasing proficiency in the area of writing and bonding time with my son. This experience is evidence of Dr. Zimmerman's sensitivity to the many areas of development required to complete the dissertation process and his steadfast determination that each student not fall short of self-set goals. His encouragement to adjust strategies never implied that the goals would not be met they remained intact. However, in cases where the doctoral candidate is not able to secure a sample, or collect significant data, I have known Dr. Zimmerman to gently revisit the planning stage and set the stage again for a research study that will yield significant results.

Self-Reflection Phase

Self-reflection allows the doctoral candidate to attribute successes and failures to one's actions during the planning and performance phases. This is possible due to the power of the mentor's feedback method; it is personal, professional, and scholarly. His approach has given control to the doctoral candidate from the very beginning of the process, providing instructive and valuable information when adjustments are required. He absolutely makes you feel as if you have arrived at the most important conclusions independently, and you happily take ownership of it, with the knowledge that his expertise made it possible. Feedback from Dr. Zimmerman is the outcome of one's own self-evaluation, a thorough examination of attributions, and a considerable amount of revisions. The interactive nature of the cyclical process of the forethought, performance, and self-reflection phases before the defense of the work is very different than when the candidate is preparing for the defense.

As Dr. Zimmerman moves the candidate into preparation for the defense, he becomes both your mentor and advocate. The role shifts, it is your work that needs

defending, not his. Rather than be a step ahead, Dr. Zimmerman's role is now secondary to yours. As you take charge of the last phase of the doctoral process high self-efficacy is a result the process, which has brought you to the place where Dr. Zimmermann believes you have work worth defending. From the view of the candidate, this is a dream come true. At this point you are about to dive into the defense preparation by making a power point, when from your subconscious emerges seeds of the self-regulatory cycle.

Independently, you begin focusing on setting goals, choosing strategies based on the past performance, attributing the success of your work to specific actions, and checking self-efficacy. It is through self-reflection that the candidate sets the stage for the defense. Without direction from the mentor, the mentee independently completes the self-regulatory process. Manuscripts are sent to the committee, the mentor approves the defense, and a date is agreed upon. During the defense Dr. Zimmerman's approval is noted from his eye contact and quiet nod. He has prepared you by allowing you to take a proactive role in the work you are defending. Ownership of the process has produced high self-efficacy, and it is demonstrated every time one of his students responds to a question from the committee.

A Legacy in Real Time

Having Dr. Zimmerman as a mentor has not only been a life changing experience for me, but in turn has impacted the lives of every teacher education student I come in contact with and the students they will teach. If only I had become a self-regulated doctoral student his time would have been wasted. What he counts on is that we will be as generous with others as he has been with us in sharing the self-regulatory processes with those who need strategies to improve their lives.

When we met in an Upper East Side, NYC restaurant to celebrate Dr. Zimmerman's retirement many of the former students attending met for the first time. What amazed me was that as each one spoke he/she was telling my story. Each spoke of a mentor who never behaved like the "rock star" we all knew him to be. Stories were told regarding how Dr. Zimmerman provided each one with experiences to build self-efficacy, countless hours of mentoring, editing, and the patience needed to work with the most challenging individuals.

The Zimmerman mentoring model is one of generosity in sharing his expertise coupled with the belief that each student he mentors will develop personally and professionally. He brings into each mentoring session a high level efficacy that the goals he has set for himself as a mentor will enable the doctoral candidate to achieve success. In this context, the mentor has designed a “no fail” zone if the mentee is willing to embrace and employ the cyclical phases of self-regulatory processes.

One of my colleagues asked me if Dr. Zimmerman knew how great an influence he has had in changing the course of a teacher education of a small private college in New York City, which attempts to give underprepared minority students an opportunity to pursue teaching credentials. I return to the first question Dr. Zimmerman posed to me, what do I want to be an expert in? I responded I wanted to become an expert on how to help my underprepared students pass the test of basic skills so they could remain in our teacher education program. He immediately responded affirmatively and I began the research process which culminated in the article I recently published linking adaptive help-seeking with success on one New York State Certification Exam which measured basic skills. As a result of our work, our department has been able to help students who often drop out of the teacher education pipeline remain in the program, and many of them are now teaching in urban charter and private schools. Each teacher that we send into the classroom has the opportunity to model self-regulatory practices for their students, parents, other teachers, and staff.

Conclusion

Dr. Zimmerman has stated that he views his students as his greatest contribution to the field, and our success is his greatest source of personal accomplishment. His mentoring model has inspired each one of his students to lead by example within our spheres of influence. Taking more time for our students to understand the value of the planning process, remaining available during the performance stage to provide feedback in a timely manner, and helping them attribute success and failure to particular strategies. When we assess the impact Dr. Zimmerman’s mentoring has made on our lives, we are challenged to do no less with those who enter our office or classroom doors on a daily basis.

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